10

15

What Is Claimed Is:

1. An anti-reflection coating-forming composition comprising a polymer and a solvent, said polymer having a structural unit represented by the following formula (1):

$$\begin{array}{c|c}
R_2 & R_3 \\
\hline
 & X \\
\hline
 & R_1 \\
 & n
\end{array}$$
(1)

wherein R_1 is a monovalent atom other than a hydrogen atom or a monovalent group, and n is an integer of 0-4, provided that when n is an integer of 2-4, a plural number of R_1 's are the same or different; R_2 and R_3 are each a monovalent atom or group; and X is a bivalent group.

- 2. The composition according to Claim 1, wherein R_1 is a halogen atom, alkyl group, alkenyl group, nitro group, amino group, hydroxyl group, phenyl group, acyl group, carboxyl group, sulfonic acid group, or mercapto group, provided that when a plurality of R_1 's exist, they may be the same or different.
- 3. The composition according to Claim 1, wherein R_2 and R_3 are each independently a hydrogen atom, halogen atom, alkyl group, alkenyl group, nitro group, amino group, hydroxyl group, phenyl group, acyl group, carboxyl group, sulfonic acid group, or mercapto group.
- 4. The composition according to Claim 1, wherein the structural unit having the formula (1) comprises the structural unit represented by the formula (2):

15

20

25

$$\begin{array}{cccc}
R_2 & R_3 \\
R_4 & (2) \\
\hline
 & R_1 \\
 & n
\end{array}$$

wherein R_1 - R_3 and n are as defined above, and R_4 stands for a hydrogen atom or a monovalent organic group.

- 5. The composition according to Claim 4, wherein the structural unit having the formula (2) accounts for at least 50 mole % in the whole structural units represented by the formula (1).
- 6. The composition according to Claim 4, wherein R_4 is a straight-chain or branched-chain alkyl group with 1 to 6 carbon atoms, a straight-chain or branched-chain alkenyl group with 2 to 6 carbon atoms, an alicyclic group with 4 to 10 carbon atoms, an aromatic hydrocarbon group with 6-12 carbon atoms, or a 4-10 membered heterocyclic group.

7. The composition according to Claim 1, wherein the solvent is present in such an amount that the concentration of the solid matter in the composition is in a range of 0.01 to 70

% by weight.

8. The composition according to Claim 7, wherein the solvent is present in such an amount that the concentration of the solid matter in the composition is in a range of 0.05 to 60 % by weight.

9. The composition according to Claim 1, which further comprises a crosslinking agent.

10. The composition according to Claim 9, wherein the crosslinking agent is present in an amount of not greater than 5,000 parts by weight per 100 parts by weight of the solid matter in the composition.

5

11. The composition according to Claim 1, which further comprises a binder resin.

10

12. The composition according to Claim 11, wherein the binder resin is present in an amount of not greater than 20 parts by weight per 100 parts by weight of the polymer of the component (A).